October 2000

# Study Introduction

Conducted in 1999, the Puget Sound Regional Vanpool Market Study was an eight-month long analysis of vanpooling in our six county region. This study is the first of its kind — looking at vanpooling from a regional perspective and with an innovative, value-added merchandizing approach.

The Vanpool Study was designed to assess the current vanpool market and recommend future growth opportunities for vanpooling in the Puget Sound region — including Island, King, Kitsap, Pierce, Snohomish and Thurston Counties.

The market study was undertaken by a team of consultants, assembled from Connecticut, North Carolina, Florida and Washington State. It was sponsored by the WSDOT Office of Urban Mobility and guided by an advisory group of two dozen stakeholders — including local program operators, employers, public sector agencies, and private sector organizations. For the complete list, see the sidebar on page 4.

Puget Sound Area Employer
VANPOOL PROGRAMS
Operating from 1970's and 1980's

Allstate Insurance
Boeing Company
Honeywell
Howard S. Wright Construction
Port of Seattle
Recreational Equipment Inc. (REI)
Safeco Insurance
Tacoma Boat
United Olympic
University of Washington
Washington Federal Savings
Weyerhaeuser Company

## Historical Background

Vanpooling is a travel mode that brings five to fifteen commuters together in one vehicle – typically a van. In the fall of 1999, the Puget Sound region had 1,250 "public" vanpools. These were provided and operated by six local transit agencies. We estimate that there are another 200 private vanpools, organized by individual van owners commuting in their own vehicles. For a complete list of public vanpools, by sponsor, see table 1 at the top of page 2.

The year of 1999 marked the **20**<sup>th</sup> **anniversary of publicly sponsored vanpooling** in the Puget Sound region. Public vanpooling was started here in 1979, by the Seattle/King County Commuter Pool Program, a ridesharing service established by King County and the City of Seattle during the fuel crisis of the nineteen seventies.



1979 - 1999

The Commuter Pool vanpool program was the *first public vanpool service* in the nation. It transferred from the City of Seattle to Metro Transit in 1984 and to King County in 1994. In the intervening years, vanpool services were started by five other transit agencies in the region, including Kitsap Transit in 1982, Intercity Transit in 1982, Community Transit in 1986, Pierce Transit in 1986, and Island Transit in 1988.

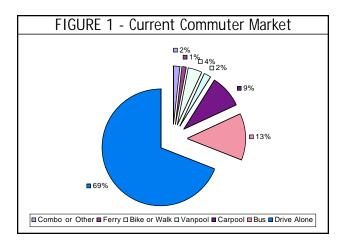
Many people are surprised to hear that employers in the Puget Sound region offered vanpool services even before public transit agencies got their start with this commute service. Corporate sponsored services were developed by at least thirteen forward-thinking local companies (see sidebar this page). During the early 1980's, almost all employer vanpools were transferred to the public vanpool programs.

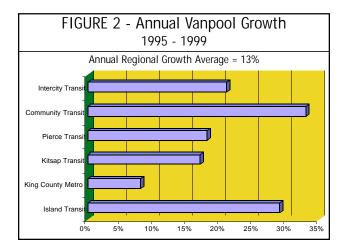
It is also noteworthy that with our growing vanpool numbers, the Puget Sound region appears to have bucked the national vanpooling trend. Elsewhere in the country, vanpooling has fallen — from a peak of 23,000 vans in the mid-1980's, to less than 10,000 vanpools in 1999. Today, at the start of the next century, the Puget Sound region *leads* the nation in vanpooling.

#### **Puget Sound Area Vanpool** October 1999 Community Transit 239 Vanpools Island Transit 30 Vanpools Intercity Transit 51 Vanpools Kitsap Transit 92 Vanpools Pierce Transit 148 Vanpools King County Metro 690 Vanpools Private Owners 200 Vanpools

1450 VANPOOLS

REGIONAL TOTAL





# Study Approach and Process

The Regional Market Assessment was conceived during the development of the *Puget Sound Regional TDM Strategy* (Transportation Demand Management) in 1998. That plan spotlights vanpooling as one of seven TDM initiatives on which the region has pledged to take action.

The Vanpool Study reflects the work of four different consulting firms and the guidance of an expert, local Vanpool Study Team (see listing in the side panel on page 4). Included among the many components of the study were:

- Literature search and review of market studies;
- On-site interviews:
- Data collection and profiles of vanpool programs;
- A regionwide commuter telephone survey;
- Screening of licensing records for van owner-operators;
- A survey of vanpoolers on the Washington State Ferries;
- Analysis of Commute Trip Reduction (CTR) program data;
- Development of a new Vanpool Cost Model;
- Identification of vanpool market opportunities; and
- Market estimates under alternative market opportunities.

The Vanpool Study Team was chaired by Scott Rutherford, Professor of Civil Engineering, at the University of Washington; the lead consultant was Byron York, from 2Plus, Inc.; and the study administrator was John Shadoff, Manager of the WSDOT Office of Urban Mobility's TDM Resource Center.

# Highlights of Current Vanpool Market

After twenty years, vanpooling is established and growing throughout the Puget Sound region. Findings on the existing vanpool market are highlighted below and on the following page:

- Vanpooling in this region has *achieved a 2% share of the overall commute market*. Among commuters who travel 20+ miles each way, vanpooling has reached a 7% market share. Transit has an overall market share of 13% of commuters among the highest and best in the nation. Figure 1 presents market shares measured by the Regional Commuter Survey.
- Vanpooling, in this region, has *grown significantly* during the past decade and more than 60% since 1995. Figure 2 illustrates vanpool growth rates for the six vanpool programs. The average, annual growth rate for the region is 13%.

### Top Ten Vanpool Markets Vanpool per Capita

Puget Sound Region	4.5 vans /10,000
Washington State	3.2 vans /10,000
Los Angeles (Metro Area)	2.2 vans /10,000
Houston (Metro Area)	1.3 vans /10,000
San Francisco (Metro Area)	1.3 vans /10,000
Washington DC (Metro Area)	1.1 vans /10,000
State of Connecticut	0.9 vans /10,000
State of Arizona	0.8 vans /10,000
Chicago (Metro Area)	0.6 vans /10,000
NY/Philadephia/New Jersey	
Combined Metro Area	0.3 vans /10,000
State of Florida	0.2 vans /10,000

# Regional Commuter Survey Highlights June 1999

Among the region's commuters traveling by car more than 5 miles to work:

- 61% commute on a major roadway
- 47% travel on Interstate 5
- 14% travel on Interstate 405
- 42% on highway with HOV lanes
- 50% experience traffic congestion
- 69% travel 10 + miles to work
- Almost half work for employers less than 100 employees
- 75% travel to worksites other than downtown business districts
- 41% of commuters are "very familiar" with vanpooling
- 67% of commuters are unaware of the names of vanpool providers

- The Puget Sound region has the *largest public vanpool fleet* in North America. Our six local operators, in fact, provide 40% of the public vanpools in the country.
- The Puget Sound region *leads the nation* in the number of vanpools per capita. The market share exceeds those of other metropolitan regions including San Francisco, Chicago, and Washington D.C. (sidebar this page).
- Each local transit agency has developed a successful vanpool program, providing *efficient*, *well-maintained*, *and reliable commuting service*. Programs differ, to some degree, in their approach to marketing, fares, incentives, administrative procedures and policy issues.
- King County Metro's vanpool program is the oldest and the largest public vanpool service both locally and in the nation. King County Metro now boasts 700 vanpools "on the road" more than half of the region's public vanpools. Community Transit occupies third place, nationally, in the size of public vanpool fleets.
- Commuters throughout the region report a *high and positive awareness of vanpooling*. Among those traveling 5 or more miles to work, familiarity with vanpooling and perceived image all rank high. On the other hand, there appears to be *substantial market confusion* about service providers, available support services and out-of-pocket costs.
- The region's vanpool *programs lose a substantial number of current customers each year*. Operators identified an annual turnover of 40 to 50 percent of vanpools and ridership. While most of this appears to be caused by job-related changes, the region will benefit if this rate of turnover can be reduced.
- Today (May 1999) the *demand for vanpools exceeds the supply* in much of the region. Currently there are some 200 groups awaiting delivery of new vans. A key barrier to growth in vanpooling is the unavailability of vehicles for new groups. Most transit agencies face difficult challenges in securing the capital funds needed to continue expanding their vanpool fleets.

(Note: In November 1999, state voters approved Initiative 695, which resulted in major cuts in transportation funding. Impacts on vanpooling and other TDM programs are not yet full known.)

### MARKET STUDY CONTRIBUTORS

#### **COMMITTEE CHAIR**

• Scott Rutherford University of Washington

#### STUDY TEAM MEMBER

- Donna Ambrose, GRTMA
- Jeff Aumell, Safeco Insurance
- Jerry Ayres, WSDOT HOV Program
- Dennis Bloom, City of Everett
- Mary Bryson, Island Transit
- Cathy Cole, Commuter Challenge
- Peter Dewey, University of Washington
- · Lindy Johnson, PSRC
- Ed Hillsman, WSDOT CTR Research
- John Lee, Kitsap Transit
- Ann Martin, King County
- Patsy Nedrow, WSDOT Van Leasing
- Gloria Newby, City of Redmond
- Carolyn Newsome, Intercity Transit
- Judy Niver, TDM Consultant
- Tom Opheim, WA State Ferries
- Syd Pawlowski, King County Metro
- Bill Roach, King County Metro
- Steve Stachowiak, Costco
- Randy Stearnes, Tacoma Public Utilities
- Daphne Tackett, Pierce Transit
- Bob Throckmorton, Community Transit
- Mikal Walsh, The Boeing Company

#### STUDY ADMINISTRATION

 John Shadoff, Manager WSDOT TDM Resource Center

#### **CONSULTING TEAM**

- Byron York, 2Plus Inc. North Carolina
- Bob Prowda, Ilium Inc., Washington
- David Fabricatore, 2Plus Inc., Connecticut
- Phil Winters, CUTR, Florida

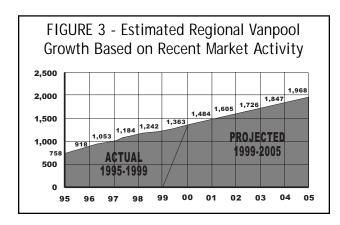
#### STUDY COORDINATOR

 Bonnie McBryan Transportation Collaborations, WA

# Contributing Market Factors

The Vanpool Market Study identified a number of market characteristics and conditions that contribute to the region's success with vanpooling. It also produced a new and more focused picture of commuter attitudes, behaviors and potential mode shifts. Highlights follow.

- Recent growth trends, a hearty economy, and growing diversification among businesses all contribute to creating a *positive market for vanpooling*.
- Currently 1.6 million commuters travel in the region, revealing *travel trends that support vanpooling*. An increasing amount of commuting is occurring across county lines. Additionally, commuting trips are getting longer; 41% of potential vanpool commuters (i.e. currently drive alone, carpool or drive onto the ferry) travel over 20 miles round trip each day.
- Washington State has established a highly *supportive policy environment* along with incentives to encourage vanpooling. The state established vanpool legislation in 1979. It offers all vanpool operators tax incentives and rideshare license plates. It provides tax incentives for employers who subsidize fares. And, it provides public transit agencies with access to both long-term van leasing and short-term van rental programs.
- Vanpool *policy on the Washington State Ferries* has also contributed to growth in vanpooling. Registered vanpools receive preferential boarding privileges and are exempted from paying the daily vehicle fares. Currently 11% of public vanpools, and as many as 60% of private vanpools commute on ferries.
- *Employer trip reduction programs* have been validated as important contributors to vanpool market growth in the Puget Sound region. Currently, 93% of the region's public vanpools commute to major employers involved in Commute Trip Reduction (CTR) programs.
- Fares and pricing have always been an important selling tool for building vanpool ridership. This study suggests that price is an important variable but not the primary factor in decisions to vanpool. Short term vanpool fare subsidies, along with regionwide pricing simplification and standardization, appear to have potential payoff in reducing commuter confusion and responding to employers concerns.

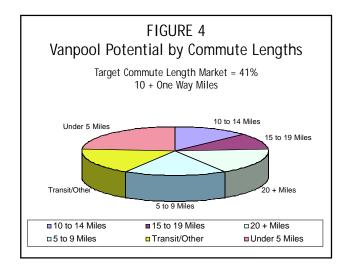


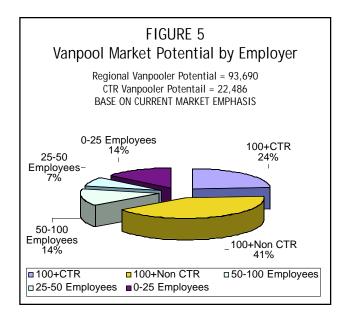
- There is *substantial latent demand* for vanpooling. This study estimated that 14% of drive alone and carpool commuters considered vanpooling within the past year. This represents 7% of the total market of *all* commuters. This "unrealized" customer base provides a strong indicator of both market penetration and market potential.
- Based only on past growth rates, the *count of vanpools should continue to increase* by at least 120 vans each year and approach 2,000 vanpools by 2005 (see figure 3 on sidebar).

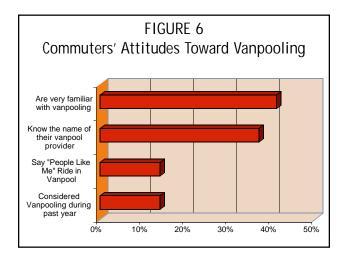
# Vanpooling Results and Impacts

Vanpooling, as a commute mode, has had a significant impact on the Puget Sound region – in terms of trip reduction, limiting congestion, and protecting the environment.

- The public vanpools in this region *eliminate more than 11,000 vehicles* and 22,000 trips every day.
- Vanpools in the region reduce the annual mileage traveled by single occupant vehicles (SOVs) by *2.7 million miles annually*. On a daily basis, this is equivalent to about one and a half hours of traffic on the Evergreen Point Bridge, operating at capacity and in both directions.
- The ferry system represents a unique vanpool market: *vanpools traveling by ferry* remove the equivalent of 2,312 SOVs each day from ferry sailings. The ferry system would have to schedule 11 additional sailings, in both peak commute times, to accommodate the vehicles that vanpoolers would otherwise drive on-board.
- Vanpooling has significant *environmental benefit*s including annual reductions in tailpipe emissions of 370 tons and annual reductions in greenhouse gases of 63,475 tons.
- Vanpooling is an *efficient and cost effective* commuting alternative. Public vanpools recover a large proportion of their costs through rider fares limiting the public subsidy needed to provide the service. Additionally, the programs are estimated to save participants \$50 million annually.





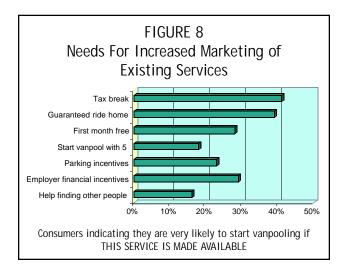


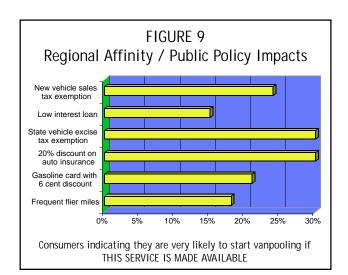
### Market Potential

The Vanpool Market Study has produced a new and more focused picture of commuter attitudes, behaviors and potential mode shifts to vanpooling. The consultant team adopted a conservative approach with its analysis — yet they uncovered high levels of market potential. The market study identified potential vanpool markets based on a number of factors.

- First, the potential vanpool market is defined as commuters who currently *rely on an automobile* for their trip to work. They include workers who drive alone to work, carpool, or drive onto the ferry. Figure 1, on page 2, illustrates this market segment as equal to approximately 80% of commuters.
- A second factor influencing the potential market is *distance to work.* Typically, vanpools serve longer distance commutes. Vanpool operators and consultants agreed that the market for vanpooling is generally limited to commuters who travel 10 or more miles each way between home and work. This market is illustrated in Figure 4 in the sidebar on this page. On a regional basis, 41% of commuters were within the target mileage group.
- A third factor used in defining the market potential is "attitude toward travel alternatives." Commuters' perspectives on the cost, convenience, comfort and status of alternative modes can be the controlling variables in their travel decisions. One goal of the market study was to measure commuters' attitudes toward vanpooling. This was done through the regional survey which asked commuters if they had considered vanpooling during the previous 12 months. Interview questions about attitudes and interests during the past year can provide more reliable attitude indicators than questions about future preferences.
- Figure 6 shows that approximately 14% of commuters seriously considered vanpooling during the last year. While an "unrealized" customer base, this result provides a viable estimate of the latent demand for the service i.e, the proportion of the target market with positive attitudes and inclinations to vanpool. It also validates the impact of current marketing, sales, and vanpool service delivery. Based on positive attitudes toward vanpooling, the unrealized vanpool potential for the region was estimated at 93,690 commuters equivalent to 7% of total commuters in the region; the unrealized market is presented on the next page, and estimates by county are illustrated in Figure 7.

FIGURE 7 Potential Vanpool Market By County			
County	Potential Market Base Vanpoolers	Potential Market Base Vanpools	
Island	1,918	235	
King	46,938	5,358	
Kitsap	8,053	898	
Pierce	17,424	2,074	
Snohomish	20,911	2,323	
Thurston	5,018	629	





	1998 Commuters	Commute Length Market	Strong Vanpool Consideration	Potential Market Base
Region	1,632,234	41%	14%	93,690

Vanpooler Market Base = 93,690 Commuters Vanpool Market Potential = 10,950 Vans

## **Enhanced Vanpool Market Potential**

After estimating the level of unrealized market potential, the vanpool market study assessed market strategies and product enhancements that could expand the customer base and convert the potential market to real customers.

Enhanced vanpool market strategies increase the potential for vanpooling in the region. The enhancement programs examined in the commuter survey were drawn from three categories.

- Vanpool Product Marketing and Packaging Vanpool supportive programs, services, and demonstration incentives exist in parts of the region. However, large numbers of commuters are not aware of them. As shown in Figure 8, as many as 40% of commuters would begin vanpooling if they knew that these services were available. Additional market share can be gained as the services in Figure 8 are expanded, carefully packaged and more heavily marketed.
- Affinity Products This category represents a new class of vanpooling incentives that promote both the initial attraction to vanpooling and the long-term retention of ridership. These products have been shown to provide a value-added bonus to other consumer products. Air miles, discounted auto insurance, discounts on gasoline, and low interest loans were among the affinity products tested. The vanpool study found that these products could significantly impact commuter choices toward vanpooling. The products tested through consumer research are presented in Figure 9. As many as 30% of consumers said they would start vanpooling if one of these products were made available.
- *Public Policy* Existing public policies, such as CTR programs, HOV lanes, and tax incentives were validated through this study. Yet, as shown in Figure 9, they are not well known among potential vanpoolers. The state and region should increase public awareness of incentives and support the creation of new public policy that will foster and promote vanpooling in the region. Consumer research found that up to 30% of consumers would begin vanpooling with a public policy incentive.

FIGURE 10 Enhanced Vanpool Market Potential			
County	Potential Market Base Vanpoolers	Potential Market Base Vanpools	
Island	3,288	403	
King	87,171	9,951	
Kitsap	12,125	1,347	
Pierce	34,848	4,149	
Snohomish	32,861	3,651	
Thurston	8,931	l 1,123	

#### Enhanced Vanpool Market

A combination of the tested products and strategies could substantially increase market potential for vanpooling. This study concluded that a strategic, regionwide package of enhancements and incentives could influence 25% of the target market. The implementation of the right combination of enhancements would create the opportunity to increase vanpool participation by another 79% — above and beyond the initial 14% that strongly considered vanpooling. The enhanced vanpool market is presented below.

	Total Commuters	Commute Length Market	Enhanced Vanpooler Potential	Potential Market Base
Region	1,632,234	41%	25%	167,304

Enhanced Vanpooler Market Potential = 167,304 Commuters Enhanced Vanpool Market Potential = 19,572 Vans

### Market Potential Summary

If current trends continue, vanpooling will increase a modest amount (approximately 120 vans) each year. With aggressive marketing and outreach, to "capture" existing market interest, vanpooling could serve up to 14% of commuters. With a carefully chosen package of enhancements, vanpooling could be made attractive to 25% of long distance (5+ miles each way) commuters.

(Note: These larger numbers represent the upper limit that, in reality, may be difficult to achieve -- for example, given the challenge of finding sufficient groups with common origins, destinations and schedules. However, the numbers do indicate that a large untapped market currently exists.)

## Vanpool Market Study Conclusions

Market indicators suggest that vanpooling will continue to grow in the Puget Sound region. Population and employment are growing annually. Public policies, such as CTR Programs, HOV lanes, and ferry loading preferences will continue to foster and promote vanpooling. Cross-county commuting and increasing reliance on ferries present growth opportunities. And, local transit operators have built solid vanpool programs to respond to demand.

The goals of this study were to estimate the region's *maximum* potential vanpool market and to identify the strategies that will best assist the region in achieving it.

Today approximately 11,000 people in the region travel by vanpool. Growth in this system, has averaged 121 vans – about 1,200 commuters – annually. This study estimated that the market that will strongly consider vanpooling is 93,690 commuters. The expanded market base, with marketing, product, and policy enhancements, is estimated at 167,304 commuters.

### New Strategic Model For The Region

The Vanpool Market Study recommends a cohesive and strategic model for vanpooling in the region. The model would define vanpool market needs as *both* attracting new customers and retaining existing ridership. This approach shifts vanpooling away from the typical "public service" model and towards a "consumer product" model — that would offer customers a distinct benefit package and a more direct relationship between operators and their customers. Key features of the model include:

- Meeting current demand quickly;
- Shifting market position to capture existing market interest;
- Employing commercial, cutting-edge customer retention strategies; and
- Focusing on value-added products and services to create and capture new demand.

This study strongly endorses the conviction that *continuing regional collaboration and cooperation* must be a key element of future vanpool expansion. Coordinated marketing and operating functions should be the norm and regionalization of some functions should be considered. While continuing the individual local operator roles, a regional collaborative can encourage efficiencies of operation, a more highly defined program focus, and greater market penetration. The regional Ridematch system, the Rideshare Hotline, the Regional Rideshare Signage project and ongoing vanpool coordination activities are examples of how the vanpool programs can work together for common goals.

Four distinct strategies define the recommended market model. They include:

- 1. A more intensive regional approach to vanpooling;
- 2. A new market position for vanpooling in the region;
- 3. Regional service consistency and economies in administration and operations; and
- 4. New product innovations and enhancements to attract and retain ridership.

# **Study Recommendations**

### Market Strategy 1:

Pursue a coordinated Puget Sound regional approach to vanpool service. Intensify efforts to collaborate on vanpool planning, promotion, marketing, and operations.

- **RECOMMENDATION 1:** Continue to work together on a regionwide effort to resolve key policy issues and pursue regional service consistencies in pricing, fares, and administrative policies.
- **RECOMMENDATION 2:** Move regional vanpooling policy issues, such as fares, program funding and fleet acquisitions, up to the region's policymakers, utilizing the TDM Roundtable and the TDM Action Committee under the Puget Sound Regional Council.
- **RECOMMENDATION 3:** Continue the Vanpool Study Team or the Regional Vanpool Coordinating Team and give it the responsibility of furthering the regional vanpool study efforts, within the context of number two above.
- **RECOMMENDATION 4**: Secure funding for additional vanpool study work and program demonstrations.

### Market Strategy 2:

Aggressively pursue a new market position for vanpooling in the Puget Sound region, including clearing up consumer confusion about vanpool services, expanding vanpooling into new, targeted markets and developing needed promotional strategies.

- **RECOMMENDATION 5:** Intensify regional vanpool marketing collaboration to promote a common regional vanpool image and identity, and to achieve greater marketing efficiencies and impacts.
  - Product Packaging
  - Vanpool Positioning
  - Collaborative Marketing and Communications
  - Local/Individual Expansion of Sales
  - Research & Development Expansion
- **RECOMMENDATION 6:** Improve awareness of the current base of incentives that already exist with public and private vanpooling; including guaranteed ride home programs, HOV ferry incentives, etc.
- **RECOMMENDATION 7**: Expand employer markets for vanpooling to include targeted marketing at CTR affected employers and development of new markets at non-affected sites.
- **RECOMMENDATION 8:** Expand owner-operator vanpool promotions to increase knowledge and use of available benefits and incentives.

#### Market Strategy 3:

Pursue service collaboration, program consistencies, economies of scale, vehicle financing alternatives and market efficiencies among the Puget Sound region's vanpool programs, their administration and their operations.

- **RECOMMENDATION 9:** Intensify regional coordination of administrative and operational issues and services among the region's vanpool services.
- **RECOMMENDATION 10:** Pursue service simplification, standardization and/or regionalization of various program elements.
- **RECOMMENDATION 11**: Develop and recommend new financing mechanisms for the capital acquisition of public vanpool vehicles and for financing and loans for private, owner-operator vans.
  - Explore leaseback van approach for local operators
  - Pursue a new central funding/financing source to reduce or eliminate competition for transit funding
  - Develop a multiple van product line
  - Promote vanpool upgrades to full-size vans from mini-van fleets

### Market Strategy 4:

Target the 25% of the region's commuters identified as the potential vanpool market through the Regional Commuter Survey. Develop and Implement consumer oriented, product innovations and enhancements designed to attract and retain ridership.

- **RECOMMENDATION 12**: Develop a way to meet current demand quickly through early availability and accessibility to vanpool vehicles.
- **RECOMMENDATION 13**: Develop and implement a package of affinity products beginning with the early evaluation of those products that tested most positively in the Regional Commuter Survey such as airline miles, gas price discounts and low interest loans.
- **RECOMMENDATION 14**: Maintain public policies and programs that are instrumental in expanding market share, including CTR, HOV lanes, and continuing priority loading on ferries.
- **RECOMMENDATION 15**: Continue to study the impacts and efficiencies of vanpool pricing alternatives and employer fare subsidies as mechanisms that have demonstrated success in attracting and maintaining ridership.
- **RECOMMENDATION 16**: Expand carpool market through the introduction of affinity products and other resources for the potential transition into vanpooling